The ANTIQUE RADIO GAZETTE

OFFICIAL PUBLICATION OF THE ANTIQUE RADIO CLUB OF AMERICA

VOL. 18 SPRING 1990 NO. 1

THE SATURDAY EVENING POST May 23, 1925

The Wonder of Radio!

CROSLEY 50

One tube set

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It is our intention to have the Gazette published as closely as posible to the following dates:

March 31 — June 30
September 30 — December 30

The closing dates for receiving material of all kinds in order to have it appear in the next issue would be:

February 15 — May 30
August 15 — November 15

The Antique Radio Gazette is published quarterly in Madison, Connecticut

Yearly dues of $12.00 U.S. currency are payable to ARCA January 1, of each year for members in the USA, Canada and Mexico. Overseas dues are $14, which includes airmail postage.

The Antique Radio Club of America was incorporated in the State of Kentucky, in September, 1972. The first meeting was held at the Marriott Motor Inn, Washington D.C., on September 23, 1972. At this meeting, by-laws were read and approved and directors selected. We Feel that the inception of this Club is a giant step in bringing together those individuals whose chief interest lies in the area of early radio. We invite all collectors and historians of the subject to join the club. A note to William E. Denk, Secretary, 81 Steeplechase Road, Devon, Pennslyvania 19333, will bring you an application blank by return mail.

Copyright 1990 Antique Radio Club of America

CONVENTION

JUNE 13-16, 1990

J. Powel Crosley
WLW Radio
Voice of America

With Host
Greater Cincinnati Radio Collectors

To Be Held At The
RAMADA® INN
Sharonville, Ohio

Sharon Road, I-75 Exit 15

Just Minutes From The Heart Of

CINCINNATI

WELCOME!

MEMBERS AND GUESTS TO ARCA '90

It is with great pleasure that we welcome you to our fair city. Cincinnati offers a never ending look at history, from the development of modern day fire fighting to radio. Cincinnati has proven itself time and time again as a great host city.

I believe you will be delighted with the programs the ARCA staff have put together for your enjoyment. The tours are designed to keep you in awe; and the attractions in and around Cincinnati can keep you busy for many days. From the world famous King's Island, to Riverfront Stadium, Tri-County Shopping Mall to the Cincinnati Zoo, we are here to entertain your entire family. Come early, relax for a few days and get ready for the first major radio convention of the 90's.

Tim Kaiser, Conference Chairman
Tom Ducro, Co-Chairman

Wednesday, June 13, 1990

Early Arrival ..... Pre-Registration
2:00 a.m. - 6:00 p.m. ..... Check-In
NO OTHER SCHEDULED ACTIVITIES

Thursday, June 14, 1990

Sunup to Sundown ..... Open Air Trader's Market
9:00 a.m. - 12:00 Noon ..... Registration
9:00 a.m. - 12:00 Noon ..... Old Equipment Contest
(Only entries before 12:00 Noon are eligible for People's Choice Award. Serpentine Room - Regular Contest; Blue Chip Room - Crosley Contest.)
10:30 a.m. - 12:00 Noon ..... The Nation's Station, WLW
Special film and talk by Greg Rhodes and guest radio personalities
1:00 p.m. - 2:00 p.m. ..... Mel's Corner
A panel of radio historians telling it like it was. Hosted by Mel Comer
1:00 p.m. - 4:00 p.m. ..... Contest equipment viewing and People's Choice balloting
1:00 p.m. - 5:00 p.m. ..... Re-Open Registration
2:00 p.m. - 4:00 p.m. ..... Tour of Union Terminal
Now being transformed into a classic museum of national prominence. One of the premier exhibits will be the development of radio in Cincinnati. Also a tour of WCET-TV's collection of Crosley and other vintage gear from the 20's.
7:00 - 9:00 p.m. ..... Contest equipment viewing and People's Choice balloting
8:00 p.m. - 9:00 p.m. ..... ARCA Board of Directors Meeting

DISCLAIMER

Neither The Antique Radio Club of America, Inc. nor the clubs and organizations listed on the front of this pamphlet, will be responsible for any personal injury, fire, theft or any other loss of equipment which may occur during this conference. Make sure you and your equipment are insured.

This conference is a private function of The Antique Radio Club of America, Inc. (ARCA). All programs, program formats, contests, results! of contests, auctions and all other features of this conference are the sole property of ARCA and may not be copied, disclosed, published or used in any way whatsoever without the express written permission of ARCA by its executive officers.

Friday, June 15, 1990

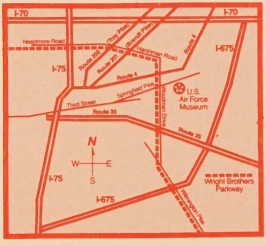
Sunup to Sundown ..... Open Air Trader's Market
(You MUST have a Trader's registration Card to display and sell.)
8:30 a.m. - 9:30 a.m. ..... Final Old Equipment Contest Registration
9:00 a.m. - 12:00 Noon ..... Registration
9:30 a.m. - 11:00 a.m. ..... Display Rooms Closed - Judges Only.
10:30 a.m. - 11:30 a.m. ..... Restoration and Collection Tips
Hosted by Ed Lyon and other experts in the field.
Bring a restoration project or idea to share.
Fountain Square Meeting Room
11:00 a.m. - 4:00 p.m. ..... Equipment display rooms open
Serpentine and Blue Chip Rooms
1:00 p.m. - 2:00 p.m. ..... Special presentation on J. Powel Crosley
by Greg Rhodes of the Cincinnati Historical Society
1:00 p.m. - 4:00 p.m. ..... Registration
2:00 p.m. - 4:00 p.m. ..... Tour of "Voice of America" Radio Station
4:00 p.m. - 5:00 p.m. ..... ARCA Membership Meeting - Poolside
4:00 p.m. - 5:00 p.m. ..... Retrieve Contest Entries
Please do not remove before this allotted time
6:00 p.m. - 6:30 p.m. ..... Social "Hour" - Poolside
6:30 p.m. - 8:30 p.m. ..... Banquet and awards ceremonies
with special guest speakers
9:00 p.m. - 11:00 p.m. ..... Auction check-in

Saturday, June 16, 1990

All Day ..... Trader's Market
7.00 a.m. - 8:30 a.m. ..... Final Auction Check-In
8:30 a.m. - 12:00 Noon ..... Auction
2:00 p.m. ..... A very SPECIAL event!

ARCA is privileged to present, in cooperation with the University of Cincinnati and the Radio Club of America, the W. G. H. Facsimile collection. Captain W. G. H. Finch is a graduate of UC and the inventor of FAX. Also, a modest collection of DuMont equipment and papers.

U. S. AIR FORCE MUSEUM — DAYTON OHIO



A very popular attraction in traveling distance of Cincinnati is the U. S. Air Force Museum at Dayton, OH. It is the oldest and largest military aviation museum in the world. The museum uses both subjective and chronological layouts to tell the story of aviation from the Kitty Hawk to the Space Age. Exhibits include approximately 200 aircraft and missiles, plus many family oriented and historically interesting aeronautical displays.

Over one and a half million visitors from around the world come to Ohio each year to tour this unique FREE attraction.

The U. S. Air Force Museum is open seven days a week from 9:00 a.m. to 5:00 p.m., closed on Thanksgiving Day, Christmas Day and New Year's Day only. The Annex is open weekdays from 9:30 a.m. to 3:00 p.m. and Saturday and Sunday 9:30 a.m. to 4:00 p.m.

OLD EQUIPMENT CONTEST CATEGORIES

1. Crystal or Coherer Receivers 1906-1927.
   a. Factory Made
   b. Homemade or Kit
2. Regenerative Receivers.
3. Superhetrodyne Receivers.
   a. Battery Powered
   b. AC Powered
4. Receivers with RF Amplifiers.
5. Radio Advertising
   a. Magazines, Signs, Store Displays, Photos, etc.
6. Speakers (horn & cone).
   a. Original "Plain Jane" Models
   b. Exotic Models
7. All American Fives (AC-DC Table Models).
   a. Wood Cabinets
   b. Bright Phenolics (Bakelite/Catalin, etc.)
   c. Other Art Deco (Metal/Mirror/Glass, etc.)
8. Cincinnati area manufacturers other than Crosley.
9. Consoles - any circuit.
10. Rare Books on Early Communications.
11. Television - Pre 1960.
12. Transistor Radio - 1950's.

CROSLEY CONTEST

1. Battery Sets
2. AC Sets
3. Advertising
4. Transistor Sets - Was there any?
5. Speakers
6. Books and Literature
7. Company History
8. Anything Crosley

Cars are to be displayed and judged in the parking lot.

OLD EQUIPMENT CONTEST GUIDELINES

All persons registered for the conference are invited to visit the Old Equipment Contest exhibit. For security reasons, your conference badge must be shown when entering the contest room.

Entry of equipment in the contest is open only to members of ARCA. Entry times are 9 a.m. to noon on Thursday and 8:30-9:30 a.m. on Friday only. Contests entries may not be picked up before 4 p.m. on Friday. Judging is done on the basis of historical significance/rarity, completeness/as original condition, preparation of the entry and documentation.

OLD EQUIPMENT CONTEST AWARDS

"THE PEOPLES CHOICE" is a special award presented for the display voted best by the public.

"BEST OF SHOW" is presented for the display having special historical significance or for the most comprehensive and documented entry.

"SPECIAL AWARD" is presented for an entry or entries that may have an outstanding characteristic that may not fit any of the established categories.

The *"HARRY HOUCK AWARD"* is presented for the best display of Superhetrodyne Receivers, both battery and AC powered Documentation is very important for this award.

"FIRST, SECOND & THIRD" place ribbons are presented in all categories.

ARCA SPECIAL AWARDS

The *"J. A. MOORE EDITORIAL AWARD"* is presented to the writer who has contributed the best article or series of articles to the *ARCA Gasette* during the previous calendar year. This award is sponsored by the West Virginia Chapter of ARCA.

The *"PRESIDENTS MUSEUM AWARD"* is a special category established to provide special recognition of ehxibits from recognized museums of rare and well documented artifacts. "The Museum Award" will provide a setting for some of America's premier radio displays, often only viewed in recognized private museums.

This award will be judged by the presidents of various regional and national clubs. This award will be known as the "Presidents Museum Award", radio preservation's highest award.

CINCINNATI POINTS OF INTEREST

Cincinnati Zoo and Botanical Gardens

King,s Island

Tri-County Mall Shopping Mall - Only 5 minutes

River Front Stadium

The Beach: The largest water amusement park in the U.S. - 20 minutes.

The Fire House Museum: A collection of early fire apparatus and engines in an original horse drawn company fire house.

Cincinnati Art Museum

Cincinnati Historical Museum

Cincinnati has many antique shops and numerous other attractions. Just write or ask at the registration desk.

OTHER POSSIBLE SEMINARS OR ACTIVITIES

Tours of Cincinnati and surrounding areas.

Largest Flea Market in the east - Weekend before June 8-9-10 at Washington Court House. Free admission and over 1500 vendors.

Open forum for editors and publishers of various radio newsletters and publications. You will meet writers and our own editors of *The Gazette* to help encourage new articles for our publication.

Trader's Market. Activities include: Chinese Auctions, Radio Ring Toss, Picture taking with Crosley and Crosley Car Show.

TRANSPORTATION TO CINCINNATI AND ARCA '90

BY CAR: See Map Below.

BY AIR: Greater Cincinnati Airport - All Major Airlines.

BY TRAIN: Amtrak

ADDRESSES, TELEPHONE NUMBERS AND OTHER INFORMATION

CONVENTION HOTEL
Ramada Inn, 11029 Dowlin Drive, Sharonville, OH 45241
I-75 Exit 15 Phone 513 771-0300
(Mention ARCA for special room rates.)

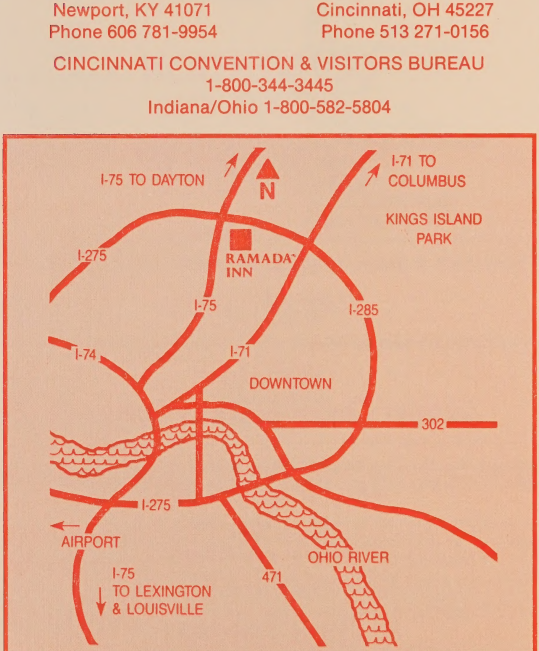
ARCA CONVENTION HEADQUARTERS
4204 Thorn Apple Lane
Charleston, WV 25313
Phone 304 744-8082 or 722-4690

ARCA CONFERENCE CHAIRMEN

Tim Kaiser
P. O. Box 81
Newport, KY 41071
Phone 606 781-9954

Tom Ducro
6805 Palmetto Avenue
Cincinnati, OH 45227
Phone 513 271-0156

CINCINNATI CONVENTION & VISITORS BUREAU
1-800-344-3445
Indiana/Ohio 1-800-582-5804



Cut apart conference registration and room reservation coupons on dashed lines and mail each to the address indicated on each coupon.

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ARCA - 90 CONFERENCE REGISTRATION

Mail before MAY 20 to: ARCA Conference Headquarters

4204 Thorn Apple Lane, Charleston, WV 25313

Description	Fee	No. Persons	Total
Registration, In Advance, before May 20	$5.00	Family	
Registration, after May 20 or at door	$8.00	Family	
Flea Market Seller's Card	$5.00		
1990 Arca Membership Card (MEMBERSHIP NOT REQUIRED TO ATTEND MEET) ☐ New ☐ Renewal	$12.00		
All Events Tour Ticket Purchase one pass and see it all Advance Tickets After May 30	 $6.00 $8.00		
Friday Awards Banquet (includes appetizer salad, potato, veg., bev., rolls, desert grat. & tax Roasted Prime Rib of Beef Boneless Breast of Chicken Marsla	 $17.95 $12.95		
Saturday Auction	$4.00		
Make check out to ARCA and mail to above address		**TOTAL**	

Name _____

Address _____

C/S/Z _____

ROOM RESERVATION REQUEST

Mail before MAY 30 to: RAMADA INN, ARCA-'90 Group #491

11029 Dowlin Road Cincinnati, OH 45241 513 771-0300

(Late reservations will be accepted on room availability only.)

Special Arca Rates: Single: $45____ Double: $45____

Arrival Date _____ Departure Date _____

Check In Time 4:00 p.m. — Check Out Time 12:00 Noon

Name _____

Address _____

C/S/Z _____

Telephone Number _____

ONE NIGHT'S DEPOSIT OR A MAJOR CREDIT CARD NUMBER WITH EXPIRATION DATE MUST ACCOMPANY THIS COUPON TO HOLD EACH ROOM REQUESTED. THANK YOU.

Deposit by check enclosed _____

Credit Card Guarantee ☐ AE ☐VISA ☐ MC ☐ Diners ☐ Discovery

Card No. _____ Exp. Date _____

Signed _____

ARCA '90
4204 Thorn Apple Lane
Charleston, WV 25303

ADDRESS CORRECTION REQUESTED

PLEASE
PLACE
STAMP
HERE

SEE YOU AT

ARCA '90

THE 1990 CONFERENCE OF THE
ANTIQUE RADIO CLUB OF AMERICA
CINCINNATI, OHIO
JUNE 13 THRU JUNE 16, 1990

Visit the Cincinatti Zoo and Botanical Gardens.

ANTIQUE RADIO CLUB OF AMERICA
BALLOT

The nominating committee is proposing the following slate of officers for the year 1991:

President: Lloyd McIntyre
Executive Vice President: Ed Lyon
Secretary: James and Barbara Rankin
Treasurer: Ron Frisbee
Publicity Secretary: Rod Phillips

Board of directors to remain the same.

If you have any other nominees, please list them here.

_____

_____

_____

The election will take place at the ARCA Natl. Conference at Cincinnati, Ohio, June 14--16, 1990. If you cannot attend, Please return this ballot,

To Dr. Ralph W. Muchow, Chairman
107 Center Street
Elgin, Ill. 60120

To be considered, your ballot must be received by May 15, 1990.

President's Page

Cincinnati, Ohio - home of Powel Crosley, WLW and the Voice of America. ARCA is, without question, the elite club when it comes to giving its members a very unique setting each year for its annual convention. ARCA has become your travel guide as each year we take you to a different historical place in this great country. No other club offers this privilege to its members.

ARCA '90 is filled with adventure as we review the achievements of Mr. Crosley and several other Cincinnati radio manufacturers. The Ramada Inn has provided us with the best facilities of any meet I have attended (to date) for the largest Trader's Market ever! They are better suited for our type of meet than any I have seen.

Some unusual things have been planned for your enjoyment. Because of the rather large and expected turnout of Crosley fans, a separate contest has been established just for them. I have been in contact with the Crosley Automobile Club and they have announced our convention in their Crosley Quarterly. Inquiries have indicated there will be some nice Crosley cars there. Tim Kaiser and crew have promised to make the Trader's Market one to remember with contests and a continuous Chinese aution.

I have been in touch with Stuart Meyer, and if all goes well, we may help dedicate a special exhibit to W. G. H. Finch, the inventor of the FAX machine, as well as papers and equipment of early DuMont TV items. This will take place at the University of Cincinnati.

Please look over the enclosed brochure, and articles published in the Gazette to make sure you have not, or will not miss anything.

I am very pleased to announce the appointment of Jim Troe as Associate Editor. John and Ruth Drake have struggled long and hard to keep the Gazette in-step with our club, and with some additional help from Jim, we trust there will be a renewed interest by our membership to provide more articles for our mutual interest. Jim served as President of your club for several years with myself as his understudy. He proved his leadership ability then, as I am sure he will in this new endeavor. Welcome back to active duty, Jim!

There are a few comments I would like to make about the loss of our very good friend and ARCA member, Harry Houck. I personally never had the privilege of meeting Mr. Houck, since his health in recent years has kept him away. I have, however, become well-acquainted with his nephew, Co. Gilbert Houck. Gilbert, working very closely with Harry the last few years, has added tremendous amount of prestige and financial stability to ARCA. ARCA has had some rough roads to travel in the past decade, but thanks to the efforts of Harry Houck, ARCA's future is well-assured. I have nothing but the highest regard for Gilbert and for his dedication to the future of this and other organizations with which he is associated. The officers and Board of Directors extend our heartfelt condolences to Gilbert and his family.

Lloyd McIntyre

NEWS FROM CHARLESTON

The collection of the late Frank Lynch was auctioned off Saturday, January 13th. Reserves were set low to honor Mr. Lynch's wishes that his collection be sold at reasonable prices to local chapter members. The equipment was in good-to-very good condition, except as noted in the list shown below.

Howe crystal set	$ 70.00
Baldwin Headset in box	20.00
Edison Fireside cylinder player 2/4 min.	135.00
Mohawk TR	60.00
Music Master horn	40.00
Radiola 100-A speaker	10.00
AK type JB speaker	35.00
AK type E speaker	17.00
Crosley Model 7V2	35.00
AK Model 72 console	70.00
AK Model 21 (rare)	100.00
RCA Aeriola Sr.	90.00
1950's A-B-C power supply	30.00
Silvertone 3 dial with enclosed speaker	35.00
Crosley 51	40.00
Zenith Transoceanic	25.00
American Bosch 28 w/cathedral speaker	75.00
Advanced Auto Neutrowound, 1926	100.00
Riders volumes 2,3,4, and 5 all	30.00
VZ 1325 horn	15.00
Supreme 400-B test gear	40.00
AK horn	15.00
GE Model H-73, curved front	26.00
Philco table model 53-954	10.00
3 crystal detector units w/slider coils	22.50

There were numerous small items - tubes, coils, transformers, knobs, etc. also sold. The sale was not publicly advertised and some items such as manuals and catalogs were sold in bulk to the chapter. Given the condition of Ithe equipment, some good buys were made, including an AK model 10-C breadboard that needed part of the Det-Amp unit (type TA) that received a top bid of $120.

One elderly member, who traveled round trip about 90 miles to attend the auction, stated it was worth the trip just to see the old equipment. I had never met him, but a few days later I saw a newspaper announcement of his birthday on the next Saturday, January 20th. So, Mr. William Giles, here is a belated happy 85th birthday wish.

The chapter has been given first refusal on a property with a multilevel building for use as a club house. The officers are now evaluating the offer and discussing the pros and cons as well as other details involved in such a venture.

Zane W. Parsons
Reporter

ANTIQUE RADIO SWAP & SELL MEET

The New England Antique Radio Club will hold its Spring Swap & Sell Meet Saturday, April 21, 1990 at Resurrection Center, 449 Broad Street, Nashua, NH.

Participating will be club members from throughout New England, New York and New Jersey with over 70 tables of antique and collectible radios, TV's, parts, books, magazines and other related items available for sale or trade. Special events of the day will include two radio contests featuring Catalins and One Tube Sets; as well as a seminar on "Radio Repair for Beginners". Members and non-members alike are invited to attend and enjoy a day of fun and nostalgia.

Swap Meet hours are 8 a.m. to 1 p.m. Early buyer admission is $5.00 from 8 a.m. to 9 a.m. and general admission is $1.00 from 9 a.m. to 1 p.m. All proceeds to benefit the New England Antique Radio Club.

To reach Resurrection Center, take Rt. 3, Exit 6: Traveling north turn left at the light onto Rt. 130 and travel 1½ miles west. Traveling south, turn right at the light onto Rt 130 and travel 1½ miles west. Watch for the NEARC Swap Meet signs on your right.

For more information about the Swap Meet or membership in the New England Antique Radio Club, call or write: NEARC, P.O. Box 809, Contoocook, NH 03229. (603) 746-6127.

Indiana Historical Radio Society and Antique Wireless Association Regional Spring Meet

Friday, May 4 and Saturday May 5, 1990 at the Holiday Inn, Plymouth, Indiana, near US 30 & US 31 on SR 17.

Friday, May 4:

Noon Buffet — in the motel dining room ($3.85).
Afternoon — Early Registration.
3:30 p.m. — "Show and Tell" restoration clinic. Bring your ideas and your questions on restoration.
7:00 p.m. — "Old Tyme Movie", AWA Show and reception.

Saturday May 5:

9:00 a.m. — Swap Meet in the parking lot. Registration in the lobby.
9:30 a.m. — Register items for the Old Equipment Contest (classifications to be published).
10:00 a.m. — Register items for the afternoon auction.
10:30 a.m. — Contest judging. Best of show receives the Grebe Trophy.
Noon - buffet in the motel dining room ($3.85).
1:00 p.m. — Auction of personal and donated items. A 10% donation to the IHRS Museum Fund is expected.
4:00 p.m. — Continuation of the Swap Meet.
6:30 p.m. — Social hour.
7:00 p.m. — Banquet and Awards. Entertainment to be announced.

FOR A COMPLETE PROGRAM (ready after March 1st) please send SASE to Ross Smith, 1133 Strong Ave., Elkhart, IN 46514. Programs will be mailed to all AWA members in neighboring states by April 1st.

FOR ROOM RESERVATIONS ($39. single, $45. double) contact the Holiday Inn, 2550 N. Michigan Ave., Plymouth, IN 46563. Write or call (219) 936-4013 and mention IHRS-AWA for special rates, not available on the 800 number.

A SPECIAL REVIEW

Mention the word "radio" these days and without fail someone will start talking about the old radio in Aunt Hilda's attic or the programs that they listened to when they were growing up. The "Good Old Days" magazine published by House of White Birches, has chosen, "Radio In The Good Old Days" as their featured story. The entire magazine from cover-to-cover talks about everything from the "Miracles Of The Airwaves" to "Radio Recipes From The 1920's". There are 20 featured stories, by as many authors, recalling their adventures with radio. The painting for the cover of the magazine depicts Grandma and Grandpa in front of their Philco 81, an original by Loren Entz. I think you will enjoy this magazine. If you cannot find a copy, the ARCA bookstore should have a few copies available for $2.95, plus $1.50 postage and handling.

Zane Parsons

NEW BOOK RELEASES

The West Virginia Chapter Bookstore is pleased to announce five (5) new titles that have been selected for your reading enjoyment. Rarely a month passes that a new publication relating to radio is not added. These five books, which we will describe briefly, were chosen from some fifteen new books.

"Arvin ... The First Sixty Years": A history by Coke Coons. The book is in limited supply. This was a company book published by Arvin Industries in 1982. We obtained several copies and we believe you will enjoy the 263-pages, as Mr. Coons brings back memories of a great company. The book covers everything from the famous Hop-a-long Cassidy radio to Blitz cans made for World War II.

"Gernsback's Shortwave Library": Reprinted 5 small 5 x 7 books from Vol. 1 thru Vol. 5. Millions of these little pocket books were published and sold for 10¢. These are a super reprint with a lot of little helpful hints. We think you will enjoy building some of the projects or just remembering when.

"Radio For The Millions": This book was prepared by the editorial staff of **Popular Science Monthly** in 1945. This is a 6 x 9 200-page reprint, and is an accumulation of projects and articles **Popular Science** had published over the previous years. It is an exciting book and offers the hobbyist, as well as the historian, the opportunity to recreate some fascinating projects.

'Vision By Radio - Radio Photographs - Radio Photograms 1925": By C. Francis Jenkins. This 6 x 9 140-page book was written by the man himself in 1925. Now we are privileged to have a fresh, new reprint of a book that describes in detail what the man's vision was of our world of television.

"Tesla's Experiments With Alternate Current": This 5½x8½ paperback with 170-pages adds yet another book to our series on this fascinating character. There seems to be a renewed interest in Tesla as we see more people reading and building some of Tesla's coils.

We hope you will enjoy some or all of these new books. We enjoy reviewing them and look forward to bringing more new titles your way.

David Manning
Publication Staff

LETTERS

Here are my dues for 1990. The ARCA is a great organization. I've learned practically all I know about Antique radios through the Gazette. Keep up the good work.

Happy New Year.

Sincelerly,
Glen A. Buell

Dear Folks:
Please extend my dues for another year as it is the best 12 "Bucks" I ever spent!

I was laying "in state" in the Intensive-Care Unit of the local hospital (Myocardial Infarction) when the XYL brought me the current issue of the "Gazette" and made my day! I didn't realize how much I looked forward to your journal - it was like a visit from an old friend!

Best regards,
Fred W. Creed

Dear Mr. Drake:
Perhaps this account of a double dealing dial string experience might be helpful to others.

Dial cord stringing is often a manipulative exercise but the RCA 3-BX-671 required some head scratching as well. That particular excellently preserved, leather cased, 7 band portable model was more than commonly tedious, because the band indicator is a separately stringed device mounted to cover the tuning condenser drive drum. No problem if you happen to have ten inch long, ⅛" diameter fingers. Otherwise, it first has to be undone and then lastly, reassembled. At any rate, some thirty minutes later the job is done. Right?

Wrong! The dial pointer moved precisely half the width of the approximately 7" dial face. There must be a way to unwind the cord twice around the drum, but I don't see it. Back to the shelf until I can acquire Sams 228-14.

A lot of help that was. Other than incorrectly showing the end idlers with horizontal axes, the diagram is exactly as I strung it. What gives with Sams? And with RCA?

Fig. 1 is as depicted in Sams 228-14, but with the end idler axes corrected. Note, not a hint of the band indicator string. After much sketching of rope and pulley arrangements, the scheme in Fig. 2 was arrived at. A pair of auxilliary "pulleys" are attached to the primary cord approximately as indicated, which in turn carry a secondary cord with both its ends attached to the supporting framework at or near the midpoint between the outer idlers.

That portion of the secondary cord between the auxilliaries moves twice as fast and in the same direction as the primary. Attaching a pointer to the secondary in this area, therefore, multiplies the travel by two. I suspect the original auxilliaries were glass beads, but fishline swivels do quite nicely. Also, there is a protuberance on the dial frame very conveniently placed for anchoring the secondary string - no doubt part of the original design.

Finally, a tip for those seeking a hard (impossible?) to find oscilloscope power transformer replacement. A comparably rated ordinary radio power transformer can be used. The CRT beam current is small, one of the plate windings can easily carry the extra load of a voltage doubler (trippler or ?) for this purpose. And, almost any 6 VAC filament transformer provides 2000 volt insulation for the CRT filament.

Sincerely,
Dale Parsons

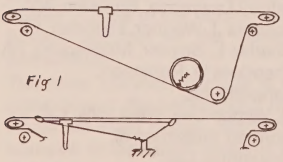

Fig 2

Dear John,

I thought you might enjoy a review of some prices of crystal sets and parts, from a Modern Radio Labs' Catalog of 1951. For the information of newer collectors, the year is correct. MRL was established in 1932, and was dedicated to the preservation and furtherence of crystal sets. They sold parts, handbooks, diagrams and kits. You could, in 1951, buy a new Philmore 2K double headset, for $2.00. New tinsel phone cords with lugs and tips were 40¢. Philmore Little Wonder Crystal sets were $1.15, The Supertone was $1.50. The big problem with the Philmore sets was that too much pressure on the slider would eventually short a few turns on the coil and ruin the set.

Some other interesting prices - Antenna Kit - 50 ft. of wire, 25 ft. lead-in, insulators, etc., 85¢. Enclosed crystal detector with glass cover - 40¢. Extra glass covers were 8¢. Mounted crystals were 25¢, and could be had in Galena, Carborundum, Silicon and Iron Pyrites.

You could get walnut-color grille cloth for 35¢ per square foot, new resistance line cords for 55¢, cartridge grid leaks in many sizes for a nickel apiece! Brand new 27 tubes were listed for 75¢, and finally, MRL would pay two cents apiece for used 4-pin tube bases, which they used to manufacture plug-in coils for various sets.

For those who may wonder, or have never experienced reception on a crystal set - yes, DX was definitely possible. I managed about halfway across the U.S.A. on a homebrew back then. Can't tell you how many toilet tissue tubes, oatmeal cartons, and hundreds of feet of MRL's double cotton-covered wire I went through winding coils for those sets!!

Dick Mackiewicz

OUR NEWEST MEMBERS

John Ploumis, Media, PA
Carl Bier, Palos Verdes Estates, CA
Charles H. Wilson, Louisville, KY
Douglas A. Booth, Jr., New Orleans, LA
Eugene Costal, West Mifflin, PA
Roy S. Blackshear, Keaau, HI
Nicholas Badovinac, Port Monmouth, NJ
Arthur J. Carroll, Troy, NY
Edward Zyszkowski, Newton, MA
Brian B. Kerfoot, Centerville, OH
Harold F. Parshall, Dayton, OH
Paul L. Toubas, MD., Oklahoma City, OK
Robert P. Lackey, Carlsbad, CA
Ted Bryan, Charlotte, NC
Vince Creisler, Kent, WA
Donald D. Hauff, Maple Grove, MN
Richard M. Volkmer, Warrenville, IL
Kendall C. Hay, Wellington, KS
Carleton Gamet, Olathe, KS
Joseph Actor, Holliston, MA
Fred M. Schultz, Ligonier, IN
Bruce Eddy, Charlotte, MI
Robert A. Jones, Elyria, OH
Ronald I. Trench, Jr., East Haven, CT
William K. Noro, Pittsburgh, PA
Donald E. Beck, Temecula, CA
Todd & Brenda Breed, Houston, TX
Charles P. Easley, Louisville, KY
Jordi Castano Portilla, Barcelona, Spain
James A. DiRuzza, Dayton, OH
Charles Kittleson, Belmont, CA
Walter C. Johnson, St. Paul, MN
Jeffrey Lawrence, Brooklyn, NY
Thomas J. Wagner, Hamden, CT
Charles L. Snyder, Millersburg, PA
Theodore D. Robinson, Asheville, NC
H. Vernon Lee, West Hills, CA
Norman Wittschen III, Columbus, OH
Thomas J. Colwell, Canfield, OH
Raymond Overland, Waseca, MN

Reinstate:

Owen Rodda, Levittown, PA
Eric Fogel, Parsippany, NJ

RESTORE YOUR DAMAGED NAMEPLATES

by Ralph Williams

Many pieces of old radio equipment carried metal nameplates. Some, like the lid inserts on the Radiola RS, were very ornate; others like the Radiola VII nameplate were busy with patent numbers and still others, like those used on all the early Atwater Kent breadboard instruments, were plain, but attractive. Radio restorers have, at one time or another, found nameplates of all these different styles that have needed some repair mostly touch-up. The question of how much damage to a particular nameplate has to occur before trying to make a repair is so subjective that it is not going to be discussed in this article. Instead, the assumption is made that the damage is severe enough to make repair desirable.

Damage occurs from wear, from chemical attack (usually hostile atmosphere), and from mechanical action like scratching or scuffing. It sometimes results from trying to clean off a foreign material such as paint or corrosion. Letters and figures are the most often hurt. One effect is abrasion of the plated surface, revealing the parent metal of the nameplate (usually brass). Usually a nameplate that has damage to the internal letters or figures has also suffered greater damages to its border. Repair of the border will be treated as part of the replating preparation.

The other common damage is discoloration of the background or fill inside the main border. Sometimes abrasion or corrosion removes part of the background fill. Generally this fill material is paint. Repair of the paint consists of careful matching of color and texture and delicate repainting of the background. Replating of the raised portions of the nameplate can also result in damage to the background, so detailed treatment of the repainting process will be considered after discussing the replating process.

Replating Techniques

The most common final finish for the shiny parts of old radio nameplates was nickel. Usually the nickel was polished after it was plated so that the final result had strong eye-appeal. Nickel is difficult to plate over some metals like zinc, but it is easy to plate nickel over copper. Therefore the standard plating process first cleaned the nameplate, then copper-plated it and finally nickel-plated the copper. Generally, the metal was electro-deposited using a plating tank and a low-voltage, moderate-current source of D.C.

For a restorer, there is no technical reason why repairs can not be made using the tank-plating process. However, there are many practical reasons why tank-plating is not the method of choice for the average collector. The mess of the tanks and the solutions, the difficulty of getting very small quantities of the needed materials and the disciplines of bath concentration, temperature and time make the whole effort uninteresting to all but the far-out perfectionists.

A small sales company, Hunter Products, Inc., sells devices which make the repair of damaged nameplates almost fun. The devices are cylinders about ¾" by 10" with soft, permeable tips that contain plating solutions. They are called Mini-plating Pens. Each pen provides a particular plating capability, ranging from copper to gold. For nameplate repair, a copper pen and a nickel pen are good choices. Before going deeper into their use, you should know that

the pens are not cheap, but neither are they overpriced. The copper pen sells for about thirty dollars and the nickel pen costs about thirty-two dollars, both exclusive of tax and shipping.

While the pens work very well for repairing ancient radio nameplates, they find application in other fields, e.g., dental labs, microelectronics and general arts and crafts. Those customers need the gold mini-pen which goes for eighty dollars. (The top-dollar model plates rhodium for one-seventy). Each pen is said to plate 300 square inches but the thickness is not given. An estimate is that the plated thickness would be just enough to correctly render the metal color but would not tolerate hard polishing. The thickness might be 1/25th of one thousandth of an inch (one micron). On a typical nameplate that amount of plating with the mini-pen would take as little as two minutes per metal.

The plating process is so simple as to be primitive. The negative wire from a 6 volt power supply is connected to the nameplate (use a clip-lead). The positive wire is connected to the upper end of the pen (another clip-lead). The power supply can be the same one you use for the filaments of your typical three-dialer. It will only have to supply about 1/10th amphere, less than one 201A takes. Rub the permeable tip of the pen on the metal of the nameplate and watch the new metal deposit. The word "rub" is my choice but the action is so light that glide would be as accurate. The pen exudes the plating solution as the tip carries it to the places that need to be plated.

Copper can be electroplated over most common nameplate metals. The exception is aluminum. Don't bother with trying to plate anything made of aluminum; that is a job for experts. Copper will coat the nickel already on the undamaged part of the nameplate, so a coat of copper over the damaged part will be accompanied by a fringe of copper over the adjacent areas. When the nickel layer is plated over the copper, the fringe will disappear and the nickel interface will be indiscernable. The trick here is to be sure that the texture of both areas is the same.

As with so many crafts, the preparation of the surfaces is far more demanding than the final action. Here the surface to be plated must be polished, free of grease and of pure base or preplated metal. This means that the bad places on the nameplate must be abraded to get to pure metal, polished to provide the desired surface texture, and then cleaned to remove all traces of the polish, wax, oil, grease, and human finger contaminants. Hunter Products supplies an absorbent pen to facilitate cleaning which I did not purchase, since I use traditional means to get clean surfaces, and this article tries to describe the process that does least damage (especially to the background) while accomplishing the repairs.

Scratches from rough abrading and insufficient polishing will mark the new area, so be sure to do a very good job on the preparation. If a border has been heavily damaged, repair may involve filing the under metal to remove the marks before the final smoothing and polishing. Use extreme care not to remove any more metal than necessary. A small scratch or gouge will be less objectionable than a border that has been lowered to the background level.

Plate copper on the nameplate by connecting the power supply and rubbing the tip on the damaged area and the adjacent good areas until there is no doubt that you have covered all the under-metal. This would take less than five minutes.

Then wash and dry the nameplate to remove all traces of the copper solution and plate nickel with the other pen. Again move the pen tip around to assure complete area coverage and keep at it until you are sure you can't see any copper. This will take another five minutes or so. you may wonder if you have plated the nickel thickly enough. The way to tell is to use a little polishing compound on the new area to see if you can reveal the copper. If the surface comes up satiny or shiny and the copper is not to be seen, you have done a good job.

Repair the Background

The other part of the restoration is the background. This generally turns out to be the fussy part of the job because the new background must match the remaining part of the old background. The material of choice for restoring the background is paint, usually an enamel. My work has been with Atwater Kent nameplates, where black was used for the background and red or another bright color was used for the center highlight. The key action is to deposit the paint on the etched part of the nameplate and to spread it as required without getting any on the unetched part (letters and border).

Given that the color and texture of the new paint blend with the old finish, depositing the paint is the tricky work. An extremely fine brush will work very well, but another way is to use a sharpened toothpick. Wet the brush or the toothpick in your paint and touch an open area of the nameplate. Spread the new paint by gently moving the tip around until the area of interst is covered. When you try this way of depositing the paint, you may find that it is far too viscous to spread evenly in a thin coat. This calls for thinner.

After trying many different paints and diluting them to provide easy working and good coverage, I have found that Sears rust control enamel and Rustoleum are satisfactory for nameplate restoration. As they come from the can, they are much too thick but they dilute nicely with mineral spirits thinner. The amount of dilution has to be determined by trial. I have found that the paint should be watery and should provide doubtful color coverage. It then dries so thin that even on shallow-etched nameplates, the new paint does not come up to the height of the letters. Several coats will be needed for nameplates where the backgroud has been abraded to the bare metal. If the etching is deep, the paint can be thicker and a single coat will suffice.

But what about the tiny spaces inside the letters, like the triangle in the letter "A"? The toothpick is the answer, but it must have a very sharp point and the paint must be very thin. The deposited paint spot will be higher than the body of the letter but it will contract as the thinner evaporates and the paint cures. Patience and experience will result in outstanding restorations.

There will still be spills and overruns. They can be corrected by waiting until the paint has started to dry and then removing the excess with that same tool, the sharpened toothpick, this time shaped as a chisel or a side-scraper. An Exacto knife works beautifully, but it will mark the plating with scratches unless it is used very carefully. High places in the paint-fill can be removed with the Exacto knife but the result will be texture that is not uniform. If the final paint coat and the nameplate itself are to be polished, the difference in texture can be taken care of. It is easier, however, to control the initial deposi-

tion of the thinned fluid paint so that when it is dry it is also uniform.

Conclusion

Restoring or repairing old nameplates can be a very satisfactory part of the whole radio-receiver restoration process. The key activities are cleaning, replating and repainting. More important for some of us is the idea that the plating and background-filling processes described above are also part of those by which new nameplates can be made when the originals have been lost. The complete reproduction of nameplates also involves photo-engraving (usually etching) and follows the simple practices that are now common for experimenters who make their own PC boards. The art of nameplate reproduction and repair, however, lies in the skill of the final finishing. Most of us can only admire what we can see. We infer the quality of the work from the quality of the end result.

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THE BEGINNING OF THE TURN AROUND THE CORNER

Radio As I Experienced It

by Bill Hoy

Man has almost always been able to accept and adapt to any conditions he is unable to change. That seemed to be true for the Depression. People seemed to feel the 1932 conditions were permanent and tolerated them without protest. Most businesses had been able to introduce less costly products to the market-place, or had folded their tents and left more sales to the survivors. The reduction in costs were obtained by increased efficiency on the production lines, using less material in products, and most of all by cutting workers' wages to the breaking point.

Police-radio was new in 1932. Frequencies just above the broadcast band were used by police radios and almost every maker provided for reception of those frequencies. Most sets used very simple methods, such as tapped tuning coils and a switch, to accomplish police-band operation because listeners were only concerned with actions in their own towns and cost had to be held low. Police departments all across the country protested that this would allow lawbreakers to follow every police action; experience did not bear out this claim. I did quite a bit of work, that year, on installations of transmitting equipment for police work.

I suppose I had learned to cope with the Depression. I was earning about forty-five dollars a week of seven working days, doing all kinds of work. For those of you who consider that low pay for seven days work, I was charging the customary rate at that time, one dollar labor plus retail price of parts used. Even at that, I was the envy of all around me. I purchased another car to replace my 1928 model, which was showing a lot of wear. Regardless of what we hear about "The Good Old Days", automobiles of those days did not last for as many miles as they do now. I was having trouble making good test findings with some of my shop equipment purchased only five years before, so new and better units were purchased to replace them. This time I purchased Weston units. I was getting requests to install heaters in cars, which had always come from the factory with none. A new electric drill and hole saws were purchased to use in this work. A place to work on

cars was next on my list. Electric refrigeration had just become common in stores. A building, once used to store ice for sale to those stores, was rented to use for that work, because it had a two-truck garage in it. Car-radio work, as well as much other radio repair, was done in that building. I shared the building with a friend, who was doing a lot of cabinet work. We spent a lot of weekends there doing our thing. Our rent was all of four dollars a month.

1932 was a year of major elections. I equipped my car with two twenty-watt amplifiers and car-top speakers and went after the summer and fall election public-address work. I supported Franklin D. Roosevelt for president, so the major part of my work was for him, though I did a lot of work for local candidates. During the last twenty-eight days of the campaign, I was on the road from five to nine each evening. I think I learned all the streets in all the nearby towns. The people of the country were so turned against President Hoover, I believe I could have been elected in his place.

Many of the new superhetrodyne sets introduced that year were capable of receiving shortwave stations. A few were all-wave, meaning from about 500 kilocycles, as they were called then, to 30 megacycles or so, but most were more limited. Some were arranged to cover narrow ranges of frequencies where the majority of the AM broadcasters were clustered. This was better for the average listener, because the rest of the shortwave spectrum held little of interest for him. Most of these sets had the extra bands added as a gimmick, it appeared, and it was amazing how well they performed because of this, --- or in spite of it. The shortwave sets did accomplish one good thing, they led to the adoption of a high intermediate frequency, around 455 kilocycles, in all sets.

Manufacturers were beginning to pay attention to the sound quality of their sets. This was a part of the performance that was physical. The customer could hear good sound quality. Some design changes made for economy resulted in better audio. These included diode detectors with automatic volume control, all-resistance-coupled audio-amplifiers, push-pull output stages, and the tuning meter to aid in tuning to the center of the signal. Incidently, the push-pull output stage was added because it allowed the addition of one more tube at no more cost than an added socket and tube plus a resistor, and it eliminated a cathode bypass capacitor costing about as much as the tube and socket. Besides, it reduced hum in the sound output and you ended up with a set less costly to build and easier to sell. Such are the earthshaking decisions designers are forced to make. These sets sold for far more than the cost of the added tube. Some designers, even respected ones, were incorporating tubes in parallel in their sets just to be able to claim more tubes. Midwest Radio, in Cincinnati, Ohio, carried this to extremes. Midwest used as many as six tubes in a circuit where only one was needed. This allowed them to advertise large tube counts when the public was equating more tubes with better sets. In the trade, those sets were called "Gutless Wonders".

The very small "mantel" sets were still popular because almost anyone could pay their low price. I was delivering newspapers over sixteen miles of highway, each morning, and I can assure you most people were not getting their news from a paper. They were listening to their radios for

news. I had no problem hauling all my daily papers in the back seat of my car. For that work, I was paid forty-eight dollars, no deliveries on Sundays. I was responsible for all my car expenses with the exception of repairs to my car. I received a discount on repairs done in the paper's own shop. Speaking of mantel sets, I do not believe I ever found even one of them on a mantel. A mantel, for those born lately, is a shelf and its trim fastened to the wall above a fireplace opening. Most homes had at least two mantels in those days.

I would say that while the country was still in trouble, 1932 was really not too bad for me. A friend once said, "You are still whistling, so it must not be too bad for you."

NEXT: THE NEW DEAL.

WHY RADIO STAMPS

By Les Raynor

What I would like to convey in this article is a matter which I might consider a bit more than trivia.

I have been an antique radio collector for several years with the interests that run the gamut, which includes some of radio's memorabilia.

Among my collective items are radio magazines. I remember reading an article some years back about Radio Stamps, in the February, 1925, issue of *Radio News.*

This article sort of stayed in my mind, as I had toyed with stamp collecting as a boy.

Off and on, this question of radio stamps flashed in my mind and I wondered if anyone was collecting them. On several occasions at swap meets I would look for a booth that might have such an item for sale, but this was not the case and, of course, this created still more curiosity.

With this in mind, I decided to do something about it. I would advertise. I thought about the ad, because I was a bit unsure as how I would word it since radio stamps were not used as we use our postage stamps for mailing. The radio stamps served an entirely different purpose.

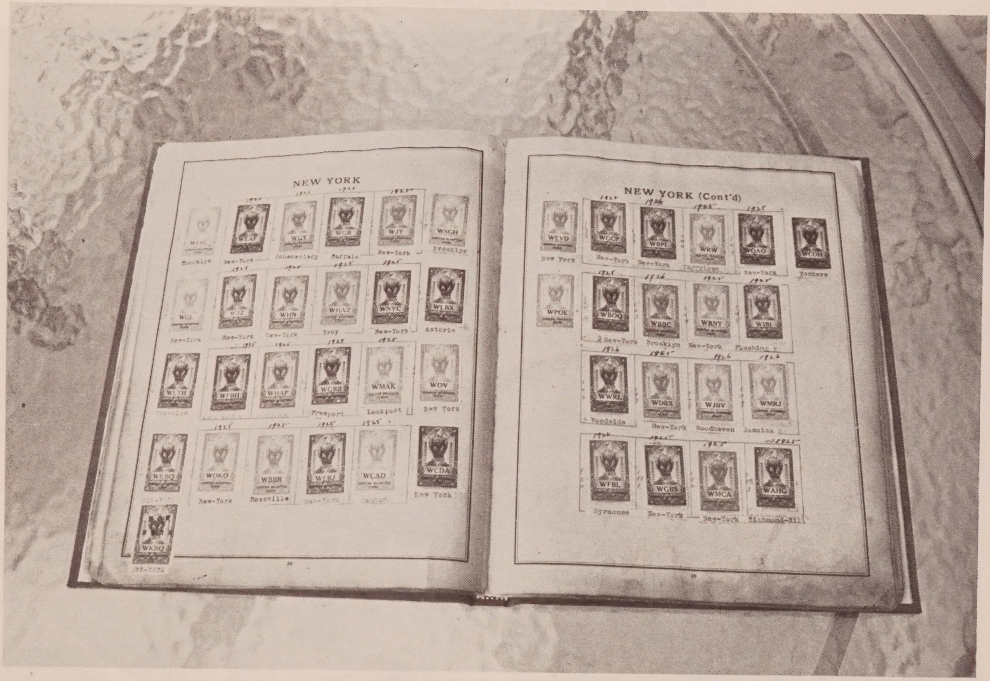
The ad was finally written. One of those four liners in a space no larger than a return address sticker. I would like to have had a more positive attitude in placing the ad, as the possibility of someone finding my query in this trader tabloid of over a hundred pages seemed rather remote.

While awaiting the results, I best explain what the radio stamps were used for and why they became so popular in those early days of radio.

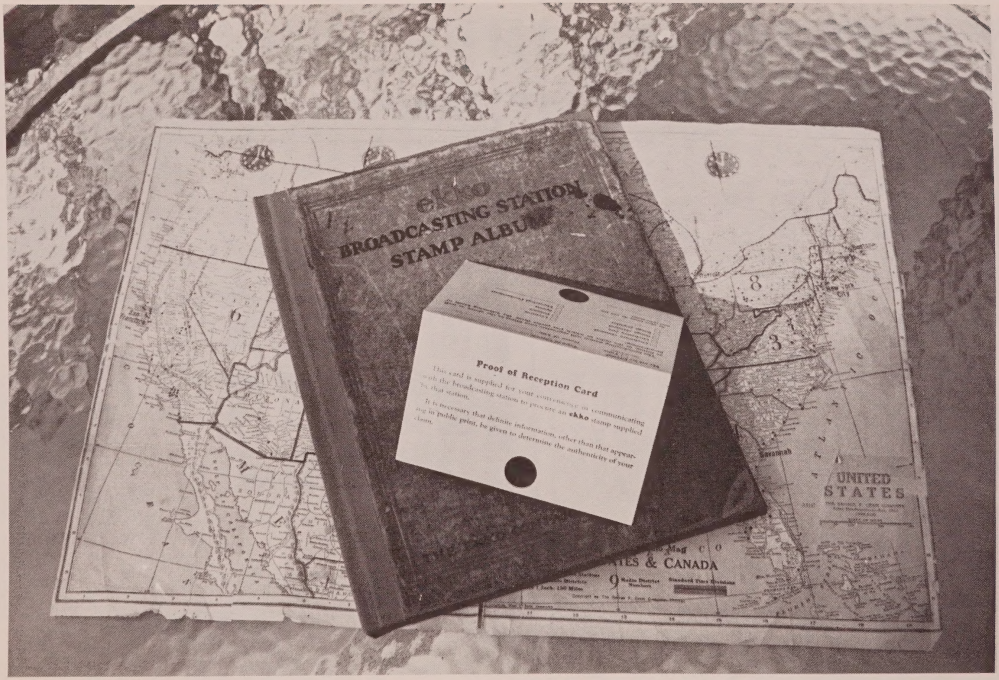
The concept of radio stamps was developed by a company called Ekko, located in Chicago. They saw the need of a unique way to perform a service called "verification" and I am sure they thought the idea could be profitable as well. How logical — this was a perfect solution to remove skepticism at a time when so many "dial turners" were embellishing their achievements about the DX station they had heard.

Radio News in its article back then had an appropriate quote, "Those who come to scoff will remain to pray."

American Bank Note was the engraver and printer of these beautiful different colored stamps for the Ekko Company which, in turn, sold them to the broadcast stations throughout the United States, Canada and Alaska. The call letters of the stations were imprinted at the bottom of the stamp and were then made available to the listeners, provided they could give "proof of reception." Ekko seemed to have all the bases covered in its quest to promote the meaning of the word "verification" and besides introducing the stamp concepts, they designed a post card reply called "Proof of Reception." Spaces were



The year written above the stamps was when the station was heard



Note the hole in the post card for the inserting of the silver dime

alloted to write in pertinent information, date of broadcast, time and a brief explanation of the program.

Concurrently added was a cut out at the bottom of the card to insert a silver dime to cover the cost of mailing the verification stamp.

To complete the Ekko agenda, an appropriate stamp album was available, along with a colored map of the United States showing the time zones, a legend indicating distance in miles, but most important, small red dots which gave the location of the radio stations that existed back in 1924.

The album was divided into two parts—the first section was similar to the standard postage stamp album. There was a designated place for the stamp which had the call letters and location indicated. At the top of the page was the name of the state.

The second section tabulated all of the broadcast stations with call letters, location, frequencies and even small squares for your dial settings.

By this time, you must have guessed that there was a response to my ad and I considered myself very fortunate. Not only did I receive several loose mint stamps, but a complete album with some 247 stamps reaching from coast to coast, Canada and Mexico. Added to this was one of the maps I commented on in this article. I can only imagine the original owner of the album must have had the patience of Job and exceeding diligence to put together such a collection.

What an exciting and wonderful experience it must have been back then, listening for the first time to these faraway stations. You can bet there were plenty of aching ears from the ever-present squealing and static that was heard through the earphones.

I surely would enjoy corresponding with anyone having collected radio stamps and would like to compare notes. Thanks for listening.

Lester P. Rayner
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THE VT FUZE OF WORLD WAR II

By William Denk
W3IGU

One of the most closely-guarded secrets of World War II, and even after the war's end in 1945, was the Variable Time Proximity Fuze, codenamed POZIT. The War Department has described it as "secondary in importance only to the atomic bomb!" Jack Nissen and A.W. Cockerill in their book, "Winning The Radar War", 1987, state that the VT Fuze, an improvement on a design brought from Britain, was developed by Dr. Arnold Pitt of the University of Toronto. The devices used by our armed forces were further refined in this country, and produced by a number of U.S. manufacturers. Because the VT Fuze comprised essentially a power supply, an antenna, a radio transmitter and a radio receiver, it was a natural for some of the country's former radio receiver manufacturers.

Older collectors will recall that, following Pearl Harbor, the manufacture of radios for the public came swiftly to a halt in favor of the production of military equipment. This writer's employer, Philco Corporation, moved rapidly into research, development and manufacture of products for use by the armed services, ours and those of our allies. Communications equipment, test and measuring instruments, radar and sonar became Philco specialties. One of the smaller items produced by Philco was the VT Fuze, the subject of this paper. It was some years after the war, when one of our labs was being cleaned out for a move, that a sample of the VT Fuze was given to me by an engineer who knew of my interest in unusual radio apparatus. That fuze is pictured in the accompanying photograph.

Before describing the VT Fuze, a brief reference to the role of fuzes generally in field artillery and anti-aircraft guns, or in aerial bombs, may be in order. Bombs and rounds of ammunition are generally provided with high explosive charges that explode on impact with the target, or just before impact, for the purpose of increasing the damage inflicted. Where the charge in intended to explode prior to impact, the timing is controlled by a fuze that is adjustable (as by clockwork) to control the time between firing of the gun (or dropping of the bomb) and its detonation. Timing is set so that the explosive carried by the projectile will be detonated shortly before arrival of the projectile at its target. In the case of anti-aircraft rounds, where the projectile may never actually meet its target, the fuze is adjusted to effect detonation at a time after firing when, in the judgment of the gunner, the projectile will be close enough to its target to inflict destructive damage.

In the case of shrapnel directed at ground personnel, the conventional fuze is adjusted so that the explosive charge is ignited shortly before the anticipated arrival of the projectile at its target. The explosion propels the shrapnel pieces forward (toward the enemy troops) in an ever widening shower, whereby to destroy the largest possible number of enemy personnel. The importance of proper timing, the function of the fuze and the person who sets the fuze, is evident from the fact that, if too long delayed, the projectile will bury itself in the earth before the explosive charge is ignited. In such event the energy of the projectile and its exploding shower of deadly fragments are spent largely in moving real estate, rather than in destroying enemy troops.

The Proximity Fuze supplied by Philco was designed to detonate its projectile at 70 feet from its target. Quoting from some Philco literature (date and publication unknown), when "used in an anti-aircraft shell, for instance, the VT Fuze begins operating when the shell leaves the gun. The shell's spinning motion rotates a vane which operates a tiny generator to provide current for the radio unit. Then the midget transmitter starts broadcasting a continuous wave of high frequency energy. When this transmitted wave strikes an airplane 70 feet away, some of the energy is reflected back to the fuze's receiver. The interaction of transmitted and reflected signal acts like an electric switch to detonate the projectile." In this quotation, the rotation of the "vane" is ascribed to the spinning motion of the projectile, but the propeller illustrated in the illustration here was certainly wind-driven - entirely so when the VT Fuze was used in conjunction with bombs dropped from aircraft.

The accompanying photograph shows a typical VT Fuze - specifically the one in the writer's collection. The entire device is 3.25 inches in diameter and 8 inches in length. The wind-driven, three-bladed propeller which drives the Fuze's generator is seen at the left, surrounded by the annular transmitting and receiving antenna. The antenna is supported by four plastic studs which form a part of the generator's plastic housing. Two of the four studs are visible in the photograph. The generator employs a number of permanent magnet poles. Their intermittent pull can easily be observed as one rotates the propeller by hand. At the base of the generator housing, to the left of the three solder points visible in the photograph, is a metal, threaded section (about 0.25 inch in Fuze length) with which the Fuze is threaded into engaging threads in the nose of the aerial bomb or artillery shell.

The transmitter occupies the left-hand half of the cylindrical, black plastic housing to the right of the threaded section. The receiver section occupies the remainder of the same housing. Finally, we come to the smaller diameter, three-part cylindrical section to the right in the photograph. Its length is about 3.25 inches. The leftmost one third of this section contains the power rectifier, the central third contains a detonator, and the final third is a socket-like connector for making electrical connection to the bomb with which the Fuze is to be associated.

Operation of the VT Fuze relies upon an ingenious utilization of the well-known Doppler effect - the change in frequency experienced when (relatively speaking) the ear or other wave receiver is moving toward or away from a source of sound or other wave emitter. The Doppler effect is most familiar to us at audio frequencies. For example, the very evident change in frequency or pitch of an automobile horn as it first approaches and then recedes from us at high speed. Or when traveling by train we pass a street crossing gate. As we approach the gate's warning bell we hear "ding-ding-ding" at high pitch - then "dong-dong-dong" at a lower pitch as we move away from the bell.

In the case of the VT Fuze approaching its target at high speed, the frequency of the wave reaching, and reflected from the target, is higher than the transmitter frequency. Similarly, the frequency of the reflected wave reaching the antenna of the VT Fuze is higher than that of the reflected wave, again due to the high speed of approach of the Fuze to the target. Thus in this interesting case we have a frequency difference of twice the usual Doppler effect difference!

Accordingly, the receiver in the VT Fuze responds to two signals - the transmitted signal and the received, reflected signal which differs from the transmitted signal by twice the normal Doppler effect shift. At a target distance of 70 feet, the received, reflected signal must be strong indeed. The detector in the Fuze would have in its output the usual sum and difference-frequency signals, along with the two applied signals. The significant detector output is, of course, the difference-frequency signal equal to the total Doppler frequency shift. That signal is filtered out of the detector output by means of a suitable low-pass filter. When this signal reaches a predetermined amplitude (corresponding to a reflecting object distance of 70 feet) a trigger circuit is fired which in turn detonates the associated explosive charge.

Regrettably, the writer has not been able to find a circuit diagram of the VT Fuze circuit, but is believed that the operating frequency was several hundred megahertz, that the trigger circuit included a Thyratron, and that the oscillator served also as detector. If one of our readers has access to a schematic diagram and other additional details, he is invited to make it the subject of another paper for later publication in the GAZETTE.

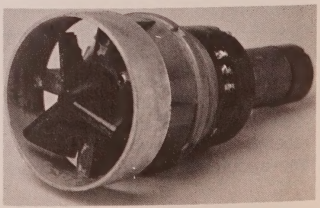
It is interesting that the VT Fuze of World War II dates from the period prior to the development of the transistor; therefore it employed vacuum tubes rather than solid state devices. The tubes (there may have been three) had to be tiny indeed, yet remarkably rugged to withstand the g-forces developed when the round of which it was a part was fired from a field artillery piece or anti-aircraft gun! That the special tubes and associated circuit components could withstand the stress to which they were subjected is remarkable indeed.

Reference to battlefield use of these VT Fuzes can be found in Charles A. MacDonald's "A Time For Trumpets, The Untold Story of The Battle of the Bulge", 1985. MacDonald states that at a meeting in Washington in October 1944, Eisenhower was first authorized to "make use of a heretofore super-secret proximity fuze (VT or POZIT) that exploded an artillery shell by radio impulses in the air just short of the target, thereby sharply increasing the lethal fragmentation effect of the burst".

First battlefield use of the device was during the Battle of the Bulge, on December 21,1944, the "Date on which American Artillery was to be free...to use the VT or POZIT fuze on its shells." MacDonald states that, at the battle for LaGleize, "those German soldiers who survived the carnage would ever after have the name for the village: Der Kessel (The Cauldron)".

Further reference to battlefield use is also found in "United State Army in World War II - The European Theatre of Operations, The Ardennes: The Battle of the Bulge" by Hugh M. Cole. Dr. Cole also identifies the first day of use of the VT Fuze as December 21, 1944, placing the first actual firing at Malmedy. Describing the device as "one of the most lethal of World War II weapons", he recounts that forward artillery observers watched "the bursts with the POZIT fuse thirty feet over the heads of the fleeing Germans and the murderous effects therefrom."

Today, forty-five years after the end of that war, at a time when we count Germany our most reliable ally in Europe, it is not easy to narrate, even briefly, the history of the development and use of this terrible weapon, and to understand that the ingenuity of man once had to be focused on the perfection of so deadly an instrument of destruction. One has to hope that mankind, the world over, has truly learned a great lesson, and that man's ingenuity and resources will in future be more usefully directed to the betterment of the world's peoples and their environment.



MEL'S CORNER

Many of our collectors often find a rare set with missing parts that are usually hard to find. Frustrated--they set them aside for the time being, and start searching with other collectors, who may have the missing link.

This is where the true restorers come in handy! Those fellows never throw anything away!! They find absolute junkers far beyond repair or restoration and strip what remains.

Over the years these items pile up!! Too good to just toss away. So--what do you do with a drawer full of meters of many types and models-various ranges?? All in the hope of finding just one that you really need. Some junkers are not cheap! But you find the one you needed! When the word gets around that you have meters, it's just a question of time to ease off the load. Patience!!

This same thing applies to dials--knobs--condensers--transformers--sockets--rheostats--coils--phones-and tubes!

Ever try to find a missing metal binding post? Have fun!!! So many different types and configurations of early days. The problem then is to find a matched group for replacement. A machine shop will usually make them but once set up, they need an order for a couple of hundred! Which you don't need!!!! Find a binding post collector----Only way out HI!

My old seafaring friend, Ed Raser, who had a fabulous Museum of very early wireless equipment, once gave me some advise as what to do with my collection.

Boil down the equipment and parts that actually mean the very most to you. Save key books and magazine catalogues of the area you lived in. The balance---let others have the fun and enjoy!!

The fun is in the finding!! There you meet great friends as well as others, who act strange at first but only until you get to know them better. This is a most interesting hobby!! You never know what eventually will show up. Come the retirement years and you will greatly appreciate all that has been going on over the years as you look at your collections----. Feel sorry for the person then without a hobby!!! YIPES!!!

These days I admire all those ARRL "ham" operators who talk to friends all over the world!! Some in groups of mutual interests, where they specialized--doctors--technician--old friends and families far away and others just passing the times of the day!! Lonely souls? NEVER!! At one time it took a room full of heavy complicated gear with power and an antenna hundreds of feet long! How those radio shacks have fallen in space. Now, with a couple of little black boxes they can reach the world!!!!

The season is now on its way for all the great radio meets of various clubs from coast to coast! A time to meet fellow collectors, old friends and flea markets galore!!! Time to find and locate that missing dial or knob--or maybe a set or two to add to the collection! So HAPPY HUNTING!!!

CHEERIO!!!!
MEL

"TICKERS"
and OTHER EARLY MECHANICAL DETECTORS

By J. L. Troe, Associate Editor

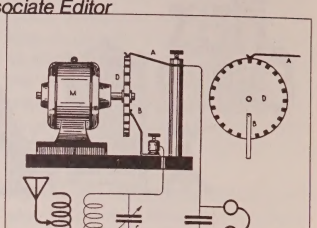
In the early days of spark wireless, many different types of detectors were tried. The crystal detector became the most popular. However, when continuous wave transmitters were invented, using arcs or alternators as the rf generator, problems in reception developed, because the crystal detectors did not work with continuous waves.

In the case of spark transmitters, the transmitted waveform had an audio component, due to the damped wave characteristic of the transmitted signal. With detection using a crystal the audio component was extracted and fed to the headphone, resulting in an audio tone in the headset. The characteristic tone of a transmitter resulted from the specific characteristics of the spark system, permitting operators to recognize stations by their audio characteristic.

With continuous wave transmitters, there is no audio "modulation" component, so there is no audio to be derived from the detection process, resulting only in clicks in the headset at the beginning and end of a dot or dash.

Poulsen is usually given credit for solving this problem with his invention of the Ticker in 1905 at the time of his development of the Poulsen Arc transmitter. However, an earlier patent was granted to Tesla in Great Britain in 1901. The name Ticker (or Tikker) was derived from the German work "tickerschaltung", a ticking contact. So, what is a ticker?

Fig. 1 shows the form of ticker invented by Poulson. An incoming continuous wave signal sets up oscillations in the secondary tuned circuit. The tuned circuit is periodically connected to capacitor C2, by the contact A which bears on the toothed wheel driven by the motor. Energy is transferred to capacitor C2 during



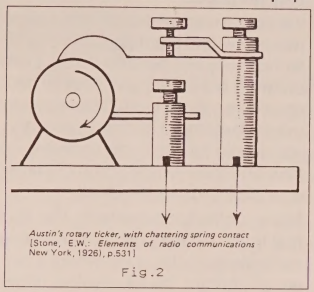
Poulsen's form of toothed-wheel ticker
[Bucher, E.: *Practical wireless telegraphy* (Wireless Press, 2nd edn., 1918), Section 221]

Fig.1

the contact closure, which is discharged thru the headphone when contact A is open. If the wheel rotation speed is adjusted properly, the signal in the tuned circuit will be sampled at a different point on each cycle, resulting in a varying current thru the headphone from cycle to cycle. This varying current will be perceived as an audio tone by the listener. The continuous wave signal broken up into dots and dashes has been converted to an audible tone. The tone heard is a function of the rf frequency and the sampling rate. A mathematical analysis shows that the audio tone is a beat note resulting from the mixing of the rf frequency and a harmonic of the sampling frequency. Because the sampling rate was typically much lower in frequency than the incoming signal, there was a complex beat frequency made up of the mixing of many harmonics of the sampling frequency with the rf signal. It is reported that the tone was typically unpleasant, being a hissing or buzzing noise.

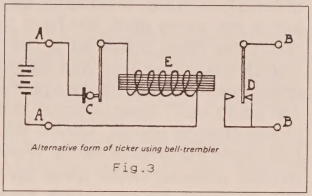
The ticker took many physical forms, all designed to drive a vibrating contact. A popular form is shown in Fig. 2. In this version the wheel is not

toothed. A spring rests on the wheel and is adjusted so the spring vibrates, or chatters, against the wheel as the wheel is rotated. Another popular form with experimenters is shown in Fig. 3. Here a standard bell buzzer is used to vibrate the ticker contact D.



Austin's rotary ticker, with chattering spring contact [Stone, E.W.: *Elements of radio communications* New York, 1926), p.531]

Fig.2



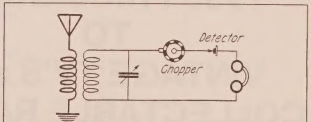
Alternative form of ticker using bell-trembler

Fig.3

The ticker was reported to be a very sensitive detector. Whereas earlier detectors were connected permanently to the tuned circuit, and therefore decreased the Q of the tuned circuit, the ticker was only periodically connected to the tuned circuit, permitting the energy in the tuned circuit to build up to higher levels of resonant oscillation than with other detectors. Rupert Stanley in his "Textbook of Wireless Telegraphy" states that ticker detectors could detect signals with powers in the aerial circuit as low as 4 x 10 to the minus tenth watts. Another advantage of the ticker over earlier detectors is that because of the frequency mixing process, signals close in frequency could be separated by ear, because of the difference in audio notes of the interfering stations. Close adjustment of the ticker rotation rate could bring the beat note of the desired station into the mechanical resonance frequency of the earphones, further enhancing the separation of desired and the interfering station.

The unpleasant tone from a typical ticker detector resulted in other inventions. R. Goldschmidt invented what he called the "tone wheel". In this version of the ticker the rotating wheel was divided into a very large number of segments and rotated at very high speed. With careful adjustment of the wheel speed, the sampling rate could be made almost equal to the incoming rf frequency, and sampling could be done on only the positive side of each incoming rf cycle. This resulted in detection of the rf and derivation of an audio beat note that was reported to be much more pleasant to listen to. Variations of this approach were developed by many to permit detection using this principle, but at lower wheel rotation rates.

A variation of the ticker is shown in early radio articles. Fig 4 is from Sept. 1923 *Radio News.* Here a rotating commutator is used to chop the rf at an audio rate. The signal is then fed thru a conventional crystal detector. No significant advantage is attributed to this approach.



A Circuit Including a Chopper and a Crystal Detector for the Audible Reception of Undamped Wave Signals.

Fig.4

However, because less precise control of the commutator speed is required, it became a popular approach with amateurs, and was implemented in many forms. Chopping of the rf at an audio rate was also sometimes done at the continuous wave transmitter. When this was done, the same detection circuits could be used at the receiver as had been done with damped wave (spark) transmissions.

With the advent of vacuum tubes and regenerative detection, the need for mechanical detectors disappeared, and so the ticker disappeared into history. During its short life, it was extremely important to the introduction of continuous wave transmission. It deserves to be remembered.

Additional information can be found in many early wireless textbooks. "Early Wave Detectors" by V.J. Phillips is an excellent reference on many forms of early detectors.

MEL'S CORNER---PLUS!!!!

From time to time, I keep hearing from our collectors asking "Where have all the real early antique items gone? such as WWI equipment--early crystal detectors---and prominent sets of the 1914--up to 1920's items." That's a good question!! Sure there are lots of those items around--mostly hoarded by old time collectors. It's getting really rare to see items in that category show up at flea markets these days--but at times they do occur.

Values have escalated on those items (when you find them), but it takes a little ingenuity and patience to dig them out from old timers and usually ham operators, who have stuff stored away mostly forgotten. Not many years ago, you would still see ads showing up now and then where some old timer was cleaning out his attic!!

Many collectors overlook the fact that there still may be some old time radio stores in their area where a personal contact could divulge either some leads or items hanging around in their basements? This tactic by personal contact provided a number of items here in the Philadelphia area just a few years ago! You have to reach the store owner-as a clerk won't know or care what your talking about. In some cases--maybe a phone call could do?? Keep in mind that stores change names. Maybe you can locate the original owner. A dedicated collector never gives up!!! Old electrical houses which have survived various ownerships may surprise you!! Even old book stores provide some checking.

Give this some thought-you never know! Cheerio!!

MEL

First Edition

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Written by:

Harry Poster (Vintage TV's)
John Sakas (Collectable Radios)

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TRANSISTOR TOPICS

By ROSS SMITH

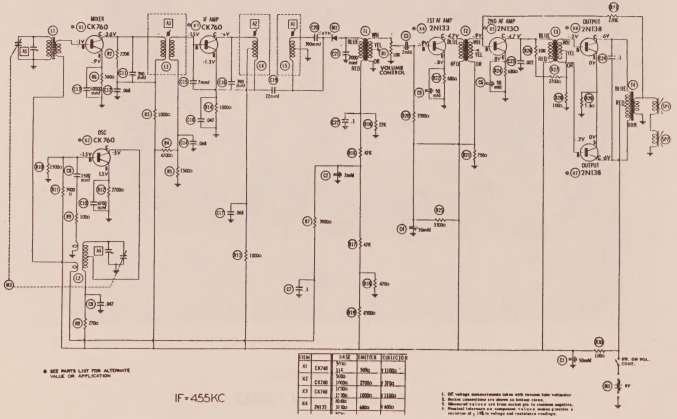
RAYTHEON MODEL T2500 SEVEN TRANSISTOR PORTABLE

Raytheon was one of the first to supply audio transistors to the hearing-aid market, directly replacing their own predominate market in sub-miniature tubes. By the mid-1950's a series of transistor radios were designed using four, six and seven transistors. These sets were manufactured by the Raytheon Belmont Division at 2951 West Dickens Avenue in Chicago.

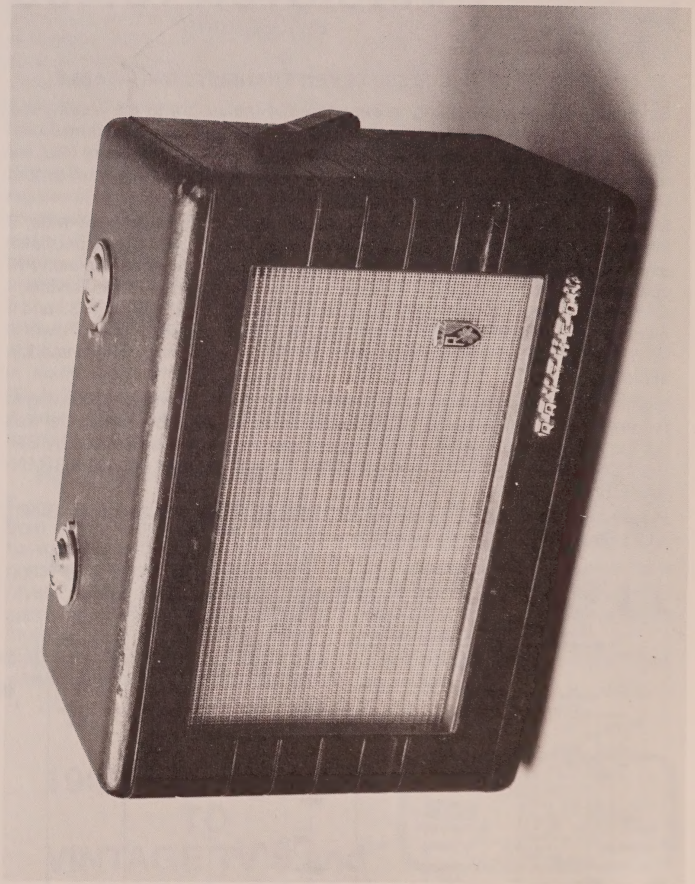
Model T2500 is top-of-the-line large portable measuring 12 inches wide, 9 inches high and 6 inches deep. It features two IF stages, a separate oscillator and two AF stages driving push-pull output transistors into twin five-inch PM speakers, resulting in superior tone and volume performance. Three Raytheon CK760 transistors are used, along with audio transistors 2N130, 2N133 and a pair of 2N138's. Type CK706A or 1N295 is used for the diode detector. Power is from six-volt batteries. Note that there are four audio transformers used in this set.

Model T2500 was released in late 1955 or early 1956. However, according to retirees from the engineering and sales divisions of Raytheon, this model was not the first transistor set. A smaller model was the first to be released by Belmont Division (in 1955). This subject will be covered in a later release of TRANSISTOR TOPICS.

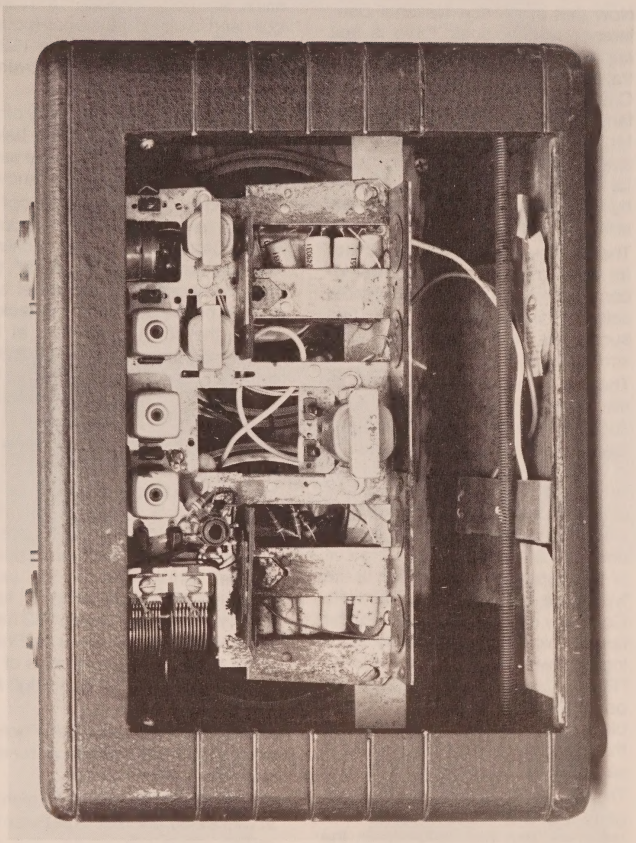
Please send articles and/or pictures for TRANSISTOR TOPICS to: Ross Smith, 1133 Strong Ave., Elkhart, IN46514



Pictures Courtesy of CTS-Turner Museum by Joe Carlton.



Raytheon Model T-2500



Raytheon Model T-2500

TWO SELDOM SEEN CROSLEY SETS

by Ralph W. Muchow, D.D.S.

Now that our ARCA National Conference at Cincinnati, Ohio is fast approaching, we will all be consentrating our interests on Powel Crosley Jr., one of radios most famous names, and deservedly so. Mr. Crosley was an extremely versatile and talented promoter, inventor and merchandiser as evidenced by the many things he made available to the public.

The Crosley Co. was always aiming for sales to the middle and lower income public, but still providing radio sets that would perform well. Two such sets are shown and described here.

The first is the "Crosley Junior", as the brass tag on the panel says. Judging from the component parts, the set was probably manufactured in 1924. The cabinet is round, only 4" in diameter and 1" high, constructed of a ring of fiber 1/16" thick with a thin wood panel on the top. The components on the wood panel consist of the crystal detector, which is the type made by the Wireless Specialty Company for Powel Crosley, 4 of the familiar nickel plated Crosley binding post with "A", "G" and the word "Phones" embossed into the wood panel and filled with white paint. A black knob with pointer for adjusting the slider completes the top of the set.

The bottom of the set shows the ingenuity of the Crosley engineers in using existing Crosley parts in the sets' construction, as the inductance coil, with insulation removed for the slider (see bottom photo) is the same coil used in other inductance (coupling) set ups Crosley used for 1923-24-25 sets. The bottom is covered with a black fiber cover.

This writer is not aware of any other examples of this crystal set being found, and if any readers have seen another please let the editor know.

The second radio was an attempt by Crosley to "dress up" the more common "Crosley 52" 3 tube receiver. This set was named "Phone 9", the name embossed on the panel and printed on the guarantee tag tacked inside the lid. A quick look at the panel will show no binding posts in evidence, quite a departure from the "Crosley 52" with all the binding posts out in front.

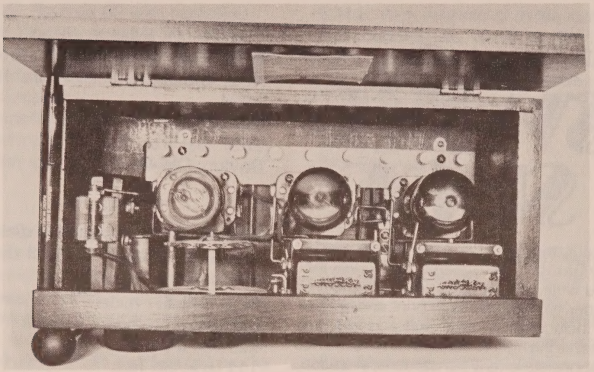
The top view of the set will show all the posts in a nice row inside.

In order for this placement of the posts, the cabinet had to be made deeper from front to back. Crosley was also able to shorten the cabinet a little. Dimensions of the usual Crosley 52 are 13¾" long, 6" high, and 4½" deep. My Crosley 52 has a serial No. 384310 whereas the Phone 9 is 445450. The dimensions of the Phone 9 are 12¾" long, 6" high and 6⅛" deep.

I have only seen one other Phone 9 and would like to know if any readers have seen any others.

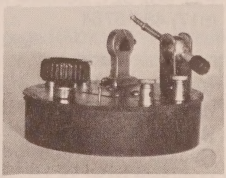
I plan to attend the ARCA convention in Cincinnati, and will have these two radios, along with several other rare Crosleys on exhibit there.

(see photos following page)

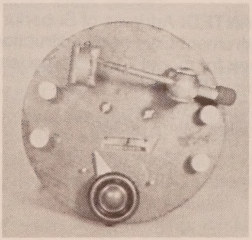


Crosley Phone 9

Crosley Phone 9



Crosley Junior
Xtal Set



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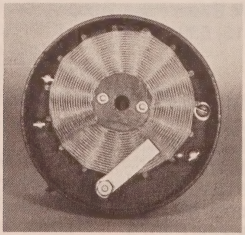

Crosley Junior
Xtal Set

All ads and Swap Shop items are printed in the Gazette free of charge. We do ask that you write your ad on a separate sheet of paper, type if possible, or print, and be sure to include your name and address. We reserve the right to edit all ads. ARCA is not responsible for any transactions, of course.

WANTED: Battery radios of the '20's: AMRAD, Atwater Kent, Deforest, Federal, Grebe, Paragon, Tuska, Kennedy, Clapp-Eastham.
Richard Sharisky
P.O. Box 521, Belmont, MA 02178
(617) 484-5784

WANTED: Duck and other early catalogs, Murdock 500 driver, clean Radiola III balanced amp, good Radiola III amps transformer w/C.T., complete base for U21325, Music-master horn base cover plate, Real photo postcards of early radio equipment, pair of knobs for Bendix green catalin model 526.
John Pisarski
114 Evans Road, Trooper, PA 19403
(215) 539-0756

FOR SALE: Mint Waverly grand cabinet, all chrome chassis, Scott Allwave 12 with all coils.
Les Rayner
5512 N. 71st Place
Scottsdale, AZ 85253
(602)947-1375

WANTED: Crosley radio parts for AC2, Crosley, precision era 1920-1924
Jim DiRuzza
2607 Old Troy Pke,
Dayton, OH 45404

WANTED: Plastic grill & dial surround, also knobs & metal dial for Philco PT95
FOR SALE: Philco PT2 brown bakelite. Exel. cond. $20.00
Mark A. Behrens
11116 E. 35 Terr.
Independence, MO 64052

WANTED: Wireless set no. 19 (Circa WWII) equipment. Also looking for anecdotes.
Chris Bisaillion
RR#1 Old Carp Rd., Kanata, Ontario K2K1X7, Canada

WANTED: Information for Jackson Tube Tester, model 648. Need tube number for tester.
Gerald Vinarcik
7759 Edgewood Lane
Seven Hills, OH 44131
(216) 524-2018

WANTED: Address of Superior Instrument Co. I need instruction book for model T.D. 55 tube tester.
Edmund DeCann
307-3rd Ave. W.
Osakis, Minn. 56360

SALE: Radiola 60 with matching RCA tapestry speaker including floor stand table — great appearance condition — make any offer — must move.
Jeannette Rivella
466 Holdridge Ave.
Staten Island, NY 10312

Want to operate that neat old Zenith Transocianic or other suitcase portable without being tied to a line cord? Just install a PORTA-POWER converter. You'll be surprised how good that radio will sound. Those were good sets! PORTA-POWER works on any radio with 1.4 volt tubes. Fits in the battery compartment with six "D" cells supplying all the power the radio needs. You can even use it in more than one set. Works on farm radios too. Order the CVA-1 for sets requiring a 1.5v "A" battery and the CVA-9 for all others. Only $89.95 plus $3.50 UPS. Guaranteed. Order from Peter Yanczer, 835 Bricken, St. Louis, MO 63122. What are you waiting for?

WANTED: Electric cord for 4 tube Tiny Tim Junior, this radio takes a special cord, it is like the radio on page 8 of Winter of 89 Gazette.
Edmund DeCann
307-3rd Ave. W.,
Osakis, Minn. 56360

WANTED: Motorola 5A5, 51M1U, 51M2U, 52M1U, 52M2U, RCA 54B1, Emerson bakelite table radio, sim. to #336 (but with horiz. louvered grill and bullet knobs), prefer good working condition; 67½ VDC battery-eliminators, (such as Maxell, LaFayette, R-S), working; White's Radio Logs 1936-1956.
A. Sherry
5410 Netherland Avenue
Riverdale, NY 10471

SALE: Fine reprints of those rare early catalogues. Such as Atwater Kent, Tuska, DeForest, RCA, Kennedy, Wireless Specialty, Sears also data on Edison Photographs. Send for latest lists.
Arthur W. Aseltine
345 Glenwood St.
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SALE: Atwater Kent breadboards-boards of all sizes, finished or unfinished at reasonable prices. Antique custom woodwork items always considered—no matter what? Any AK components available there for trade on items I may have in stock??
Lawrence DiBarry
212 N. 6th St.
Chambersburg, PA 17201
(717) 263-3804

NEW 12 page RADIO CATALOGUE Illustrated with numbers of parts and sets for sale! Everything from crystal sets to cathedrals and more — Send for a copy.
Yeary Communications
12922 Harbor Blvd., Suite 800
Garden Grove, California 92640

WANTED: TV Riders manuals Vol 6 & 8 and TV Riders indexes 7-21. Also Sony 5 transistor radio model TR510 circa 1961.
Jim Corio
P.O. Box 233,
Blawenburg, NJ 08504

WANTED: Zenith 10H571 Chassis Scott Philharmonic. Pepsi cooler radio (blue plastic)
Gary Glazier
3031 El Caminito
LaCrescenta, CA 91214
(818) 248-1693

FOR SALE: Philco #40-130 stubby tombstone $50. Wood horizontals: Temple 1946 $30; GE 1940 #H632 $45; Emerson late 1940's #565 AM/FM $55; RCA #9TX50A 1940 $40; Jewel mid 1940s $20; GE 1941 #J62 "treasure chest" $50; GE 1940 #L660 large chrome bezel, top-mounted speaker, $60. Plastic & Bakelites: Police Alarm #PR8 brown bakelite, early 1950s, tiny hairline, works $22; Zenith 1950s #G516 clock radio brown bakelite $27; Zenith 1950s #1615F green bakelite $40; RCA 1950 #8X681 brown bakelite $30; Philco #52-544 white bakelite clock radio, chrome bezel $30; Motorola early 1950s AM/FM #7XM22 $32; Jewel 1950 #910 brown bakelite clock radio $20; Stromberg Carlson 1950 brown bakelite, streamlined $30. Austin early 1930s 4 tube small cathedral, refinished, speaker poor, works $125. More available: Long SASE to Ripley, Box 9374, North St. Paul, MN 55109. 612-777-6791.

WANTED: QST 1916-1927, spark xmiter rotary and xta/ rcvr.
Edward J. White WA3BZT
809 Seymour Rd.
Bear, De 19701-1121
302-322-1313

WANTED: Symphony radio, manufactured by the Scott Transformer Co., 1929-1930 (not chrome plated), has large dial escutcheon in shape of "shamrock".
Jim Clark
1292 Starboard,
Okemos, MI 48864
(517) 349-2249

WANTED: Early model Zenith Trans oceanics, must be in working, very good condition. Send details and price wanted.
A.J. Carroll
2299 5th Ave, Troy, NY 12180

WANTED: Tektronix 570 curve tracer, Radiola 24, 6—WE 215-A tubes, NOS
Mr. & Mrs. Charles W. Rhodes
64 South River Road
Edgewater, MD 21037

WANTED: Looking for some of those white porcelain rheostats as shown in Vintage Radio, page 171, bottom right hand corner—Condition? and what you want for it—
Mel Comer
025 Roberts Road
Ardmore, PA 19003
215-642-5329

WANTED: AK brown mounted Variocoupler in fine condition; also good mounted galena crystal, Baldwin type C(?) earphones.
SWAP or SELL: AK brown mounted coupled circuit tuner, in original box, panel has repaired crack, 15 inch heavy S.P.D.T. xmtg switch, Signal Electric brass key, Coast Guard CE1162 tube, Western Electric 205B round tube, National vernier dials, Sangamo brown fixed condensers, other tubes, Brandson honey comb coils DL 1500, DeForest DL600, Giblin-Rember DL 150
Theodore D. Robinson
25 A Cedarwood Dr.
Asheville, NC 28803

FOR SALE: Philco 50B Cathedral, loud hum, a filter condenser change often gets these 1931 Philcos going again, cabinet restored, grill cloth not original, $150.

Philco 38-7T wood table model with shortwave to 19MHZ, works very weakly, very good, $100.
Also many other radios, books & tubes. Send 2 stamps for complete listing to Ron Boucher,
P.O. Box 541,
Goffstown, NH 03045
(603) 497-2988

WANTED: Magnetic coil winding machine-the type made by the Geo. Stevens Mfg. Co. Can be either cam or gear driven.
Dan Healy
P.O. Box 764
Woodacre, CA 94973
(415) 488-4596

WANTED: Crude battery sets with Ace Products metal tag made by Precision Equipment Co. Have some nice sets to trade such as Crosley 4-29P, Federal 102, DeForest Unit Panel, etc. Craig Ball, 204 N 5th St., Marshalltown, Iowa 50158

FOR TRADE: AK green type TA detector 2 stage amp, AK brown variable capacitor, AK mounted variometer, AK coupled circuit tuner, McElroy bug (Deluxe Model MacKey) and Bunnell W.U. Tel co. key. Need 1920 and earlier QSTs. Bill Hurni W3HWT 329, Evergreen Drive
North Wales, PA 19454

WANTED: Information leading to the capture of any Western Coil and Electrical Radio Co. WC or "Radiodyne": info or ads describing early radio-phono combinations (pre-1926), Neutrowound parts set, 1946 Spartan Table TV.
Eric Sanders
3295 W. 246th St.
Sheridan, IN 46069

WANTED: Diamond shaped loop antenna, folding or not. Any good brand with or without mount.
Ross Smith
1133 Strong Ave.
Elkhart, IN 46514

WANTED: Battery radios, crystal sets, headphones, loudspeakers, tubes, radio magazines and catalogues made before 1926.
Robert Stapleford
1800 Randolph
Topeka, Kansas 66604
(913) 234-4628

WANTED: Dick Tracy wrist radio and watches, and other Dick Tracy memorabilia; Crosley transistor book radios in series JM-8 (prefer new in box); Guild; "Tea Kettle" radio; and radios/televisions with oriental-style cabinets in excellent original condition.
Gerald Schneider
8750 Georgia Ave. #1410 B
Silver Spring, MD 20910
(301) 565-2840

WANTED: IF Transformers, about year 1925, All-American Series R-130 Remler 600s, Silver Marshall, Please quote price and condition.
Joe Horvath W6GPB
522 Third St.
San Rafael, CA 94901

WANTED: Howard communication receivers models: 430,435,436,-437,and Howard home sets models: 240,275,368,780,868 RCA models: 9T, 10T, 28T, 99T, 810T, T10-1, Westinghouse models: WR-214, WR-228 all in very good to excellent condition.
Doug Burskey
732 Pulver-List Rd.
Mansfield, OH 44905
(419) 522-5669

WANTED: QST-S for 1916 and 1917 R.
FOR SALE OR TRADE: QST-S June 1918, Sept. 1920, Dec. 1920, March 1921. Arrl Handbooks-1927 and 1932. CQ-S 1945, June-Nov., 1947-Jan. Feb.
R. Arrowsmith, W4JNN
3505 Woodburn Rd.
Annandale, VA 22003
(703) 560-7161

WANTED: Radios with oriental-style cabinets, radios that are also genuine furniture pieces (china hutches, refrigerators, dining-room tables, etc.), and unusual novelty (tube type) radios.
Gerald Schneider,
8750 Georgia Ave., #1410-B,
Silver Spring, MD 20910
301-565-2840

WANTED: Continental piano or Colonial globe radios. Motorola 68L11 AC/DC set. John Okolowicz
624 Cedar Hill Road,
Ambler, PA 19002
215-542-1597

FOR SALE: RBG (RCVR) (1940 version of Hammarlund (HQ-120) $75.00; Hickok 288X signal generator, 40.00; Layfayette HE6 6 meter AM rig with VFO -$65.00
WANTED: Old amateur tube xmtrs.
Parker, W1YG
87 Cove Road
Lyme, CT 06371
(203) 434-7783

FOR SALE: Rare Nazi transmitting and receiving tube collection. Scott projection television in pieces, complete and restorable. SASE for list.
WANTED: Unusual vacuum tubes and semiconductors also buying old microscopes and parts, mounted slides, etc.
Warren Johnson, 2321 Hazelwood
Ft. Wayne, IN 46805
219-482-1105

WANTED: RCA Receiving Tube Manual or any other brand, advise on price.
REPAIR: Antique Radio Repair, for most any model. Fred Cranshaw,
P.O. Box 461852,
Garland, TX 75046-1852
214-272-1120 W
214-557-5145 H

WANTED: Scott SLR-F, RMCA AR-8506B, or Hallicrafters S-22R Marine band receivers. OK if not playing, if mechanically in good condx.
Joe Devonchik
5445 Grove Ave.
Jacksonville, FL 32211
(904) 725-2331

COLLECTOR'S BOOKS

Antique Radio Restoration & Price Guide by David & Betty Johnson	$12.95
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